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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------|----------------|----------------------|---------------------|------------------|
| 09/656,170 | 09/06/2000 | Motoyasu Taguchi | 071671/0155 | 8925 |
| 22428 7 | 590 11/26/2004 | | EXAMINER | |
| FOLEY AND LARDNER | | | LIU, SHUWANG | |
| SUITE 500 3000 K STREE | ET NW | | ART UNIT | PAPER NUMBER |
| WASHINGTO | N, DC 20007 | | 2634 | |

DATE MAILED: 11/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) | | | |
|--|---|-------------------------------------|-----------------------|--|--|--|
| Office Action Summary | | 09/656,170 | TAGUCHI, MOTOYASU | | | |
| | | Examiner | Art Unit | | | |
| | | Shuwang Liu | 2634 | | | |
| | The MAILING DATE of this communication ap | pears on the cover sheet with the c | orrespondence address | | | |
| Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1)🖂 | Responsive to communication(s) filed on <u>13 September 2004</u> . | | | | | |
| 2a)∐ | ,— | | | | | |
| 3)∐ | | | | | | |
| | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposit | ion of Claims | | | | | |
| 5)□ 6)⊠ 7)□ 8)□ | 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. | | | | | |
| Applicat | ion Papers | | | | | |
| 9) ☐ The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on 06 September 2000 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) | | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152) 6) Other: | | | | | | |

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Response to Arguments

1. Applicant's arguments with respect to claims 1, 11, 12 and 22-24 are have been considered but are most in view of the new ground(s) of rejection.

Specification, Drawings and claims

2. The disclosure (including drawings and claims) is objected to because of the following informalities:

It is appears that the term "lake circuit" is used by the disclosure to mean "level measurement circuit" and "combination circuit" for rake receiver, while the accepted meaning is "rake level measurement circuit" or "rake combination circuit." The Examiner suggests changing "lake circuit" to "rake circuit", "rake level measurement circuit" or "rake combination circuit."

Appropriate correction is required.

Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 9-11 and 20-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
 - (1) regarding claims 9 and 20:

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The limitation of "a level judgment circuit for executing electric field judgment according to the correlated received signal from the finger circuit" is recited in independent claims 1 and 12. However, claims 9 and 20 recite "the level measurement is executed by computing the power level in a pilot symbol part in one frame for each slot." It is unclear whether the level measurement is according to "the correlated received signal from the finger circuit" or "computing the power level in a pilot symbol part in one frame for each slot." It is also unclear where "a pilot symbol part in one frame for each slot." It is also unclear where "a pilot symbol part in one

(2) regarding claims 10 and 21:

It is unclear what the "differences" are for, the differences between "a maximum level of electric field levels" and "an electric field level" or the differences of "a maximum level of electric field levels" obtained among plurality of finger circuit elements.

(3) regarding claims 11 and 22:

Claims attempt to claim an apparatus, but, since the claim does not set forth any limitation involved in the apparatus, it is unclear what limitation applicant is intending to encompass. Claim 11 is indefinite where it merely recites a preamble without any active, positive limitation for the apparatus.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 1-4, 8, 11-15, 19 and 22-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Sudo et al. (US 6,625,202).

As discloses in figures 3-4, Sudo et al. discloses:

(1) regarding claims 1-4, 11-15 and 22-24:

a receiving terminal for CDMA system comprising at least a finger circuit (1207-1209) having a plurality of finger circuit elements for making a correlation of a received signal from a radio circuit connected to an antenna (6) and a known signal (for example, PN, 1202) and feeding out the correlated received signal (by 1201), and a lake circuit (1205, 1206, 1210, 8, 9, 10, 12D, 18 and 13D) for combining a plurality of outputs from a finger circuit elements and executing level measurement (12D), wherein

the lake circuit includes a level judgment circuit for executing electric field judgment according to the correlated received signal from the finger circuit and a

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predetermined threshold level, an operation of at least one finger circuit element being suspended for a fixed, predetermined time period according to the result of the level judgment (column 8, lines 5-49).

Furthermore, the operation of a clock supply to the at least one finger circuit is suspended as recited in claims 2-4 and 11-15 because the power of the finger circuit (for example, a finger including 8) is off.

(2) regarding claims 8 and 19:

the finger circuit takes correlation of output signal data fed out from the radio circuit and known signal data to each other, demodulates the correlated data to symbol unit data, and feeds out the demodulated data to the lake circuit (column 7, lines 27-66).

Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 6, 7, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sudo et al. in view of Ishikura (US 5,239,684).

Sudo disclose all of the subject matter as described above except for specifically teaching a memory which is an E2PROM, and threshold data therefrom is supplied under CPU control to the lake circuit as claimed.

Ishikura et al., in the same field of endeavor, teaches a memory (107 in figure 1 and 2) which is an E2PROM, and threshold data therefrom is supplied under CPU (161 in figure 2) control to a circuit (column 4, lines 11-12 and column 8, lines 56-66).

It is well known that the area of an E2PROM cell is about one fifth of the area of a SAR cell so the area required by a given RAM on the semiconductor chip is greatly reduced, or RAM storage capacity can be increased. Furthermore, E2PROM setting value can be updated easily. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to employ E2PROM as taught by Ishikura to store threshold value of the receiver of Sudo et al. in order to update stored value easily.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shuwang Liu whose telephone number is (571) 272-3036.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin, can be reached at (571) 272-3056.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C. 20231

or faxed to:

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(703) 872-9306 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Shuwang Liu Primary Examiner

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November 19, 2004